U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE FORM PTO-1390 ATTORNEY'S DOCKET NUMBER: (REV 01-2003) 095309.55774US TRANSMITTAL LETTER TO THE UNITED STATES U.S. APPLICATION NO. (if known, see 37 CFR 1.5) DESIGNATED/ELECTED OFFICE (DO/EO/US) 10/520 CONCERNING A FILING UNDER 35 U.S.C. 371 INTERNATIONAL APPLICATION NO. INTERNATIONAL FILING DATE PRIORITY DATE CLAIMED PCT/EP2003/005964 06 June 2003 04 July 2002 TITLE OF INVENTION Piezoelectric Actuator for Media Flowing Therearound and Use of a Corresponding Piezoelectric Actuator APPLICANT(S) FOR DO/EO/US Tobias FLAEMIG-VETTER, Heinz OEING and Gregor RENNER Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information: This is a FIRST submission of items concerning a filing under 35 U.S.C. 371. 2. This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371 3. ☐ This is an express request to begin national examination procedures (35 U.S.C. 371(f). The submission must include items (5), (6), (9) and (21) indicated below. 4 The US has been elected (Article 31). 5. A copy of the International Application as filed (35 U.S.C. 371(c)(2)). is transmitted herewith (required only if not transmitted by the International Bureau). has been transmitted by the International Bureau is not required, as the application was filed in the United States Receiving Office (RO/US) 6. An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). a.
 is attached herewith. has been previously submitted under 35 USC 154(d)(4). Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) are transmitted herewith (required only if not transmitted by the International Bureau). have been transmitted by the International Bureau. have not been made; however, the time limit for making such amendments has NOT expired. A have not been made and will not be made. An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)) An English translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). Item 11. to 20. below concern other document(s) or information included: 11. An Information Disclosure Statement under 37 CFR 1.97 and 1.98. An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. A preliminary amendment. An Application Data Sheet under 37 CFR 1.76. A substitute specification. 16. A power of attorney and/or change of address letter. 17. A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 – 1.825. 18. A second copy of the published international application under 35 USC 154(d)(4). 19. A second copy of the English language translation of the international application under 35 USC 154(d)(4) 20. Other items or information: a. Four (4) sheets of formal drawings (Figs. 1-7)

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b. Copy of Form PCT/IB/308

U.S. APPLICATION NO. (if know	CATION NO. (if known, see 37 CFR 1.5 INTERNATIONAL APPLICATION NO.		CATION NO.	ATTORNEY'S DOCKET NUMBER	
10/	10/520172 PCT/EP2003/005964		64	095309.55774US	
21. The following fees are submitted:					
				CALCULATIONS	PTO USE ONLY
May Pagis antique I for				\$	
☒ a) Basic national fee. \$300.00 ☒ b) Examination fee. \$200.00					· · ·
∑ c) Search fee\$500.00					
TOTAL OF ABOVE CALCULATIONS = \$1000.00				\$1,000	
				41,000	
Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.					
Total Sheets Extra sheets Number of each add'l RATE 50 or fraction thereof					
		(round up to a whole			
		number)			
- 100 =	/50 =		x \$250.00	l _s	
G 1	6 111 1 1	1 1 1 1	20	3	
Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(e)).					
Claims			\$ 130		
		Number Extra	i Kale		
Total Claims	18 - 20 =	0	X \$50.00	s	
Independent Claims	1 - 3 =	0	X \$200.00	\$	
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ \$360.00	\$	
TOTAL OF ABOVE CALCULATIONS =				\$1,130	
Applicant claims Small Entity Status. See 37 CFR 1.27. The fees indicated above are					
reduced by ½.				\$	
SUBTOTAL =				\$1,130	
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				 \$	
TOTAL NATIONAL PER				01.100	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be				\$1,130	
accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property +				s	
,,,,,				3	
TOTAL FEE ENCLOSED = \$1,130					
				Amount to be:	\$
				refunded	
					\$
a. A check in the amount of \$1,130 for the filing fee (\$1,000) and the surcharge fee (\$1,000).				Charged	
b. Please charge my Deposit Account No. <u>05-1323</u> (Attorney Docket No. ==) in the amount of \$ to cover the above fees. A duplicate copy of this sheet is enclosed.					
c. The Commissioner is hereby authorized to charge any additional fees, which may be required, or credit any overpayment					
to Deposit Account No. <u>05-1323</u> . (ATTORNEY DOCKET NO. 095309.55774US). A duplicate copy of this sheet is enclosed.					
d. Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card					
information should not be included on this form. Provide credit card information and authorization on PTO-2038.					
NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.					
				11-1	
SEND ALL CORRESPONDENCE TO:				Muer Helmleider	
Crowell & Moring, LLP				SIGNATURE	
Intellectual Property Group P.O. Box 14300				Vincent J. Sunderdick	
Washington, D.C. 20044-4300				NAME 29,004	
Tel. No. (202) 624-2500				REGISTRATION NUMBER	
Fax No. (202) 628-8844				January 4, 2005	
				DATE	

DT05 Rec'd PCT/PTO 0 4 JAN 2005

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.

To Be Assigned

Confirmation No. : TBA

First Named Inventor

Tobias FLAEMIG-VETTER

Filed

Concurrently Herewith

TC/A.U.

To Be Assigned To Be Assigned

Examiner

095309.55774US

Docket No. Customer No.

: 23911

Title

: Piezoelectric Actuator for Media Flowing Therearound

: and Use of a Corresponding Piezoelectric Actuator

SUBMISSION OF SUBSTITUTE SPECIFICATION

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Attached is a Substitute Specification and a marked-up copy of the original specification. I certify that said substitute specification contains no new matter and includes the changes indicated in the marked-up copy of the original specification.

Respectfully submitted,

January 4, 2005

Vincent & Sunderdick Registration No. 29,004

CROWELL & MORING LLP Intellectual Property Group P.O. Box 14300 Washington, DC 20044-4300

Telephone No.: (202) 624-2500 Facsimile No.: (202) 628-8844

VJS:vlc #354319